# Heroku vs Netlify: COMPARISON

#### Team Members:-

- 1. Soumya Doogar S20180010156
- 2. Parikshit Singh S20180010128

## Heroku

The Django application was hosted on heroku webapp service. Below are the steps we followed -

- Login to heroku and go the console.
   https://devcenter.heroku.com/articles/heroku-cli go on this site and install heroku CLI to manage your repository.
- You can choose GitHub to deploy your repository also. We choose CLI on windows.
- Go to your project folder and open the terminal there and run "heroku login".
- This would open your browser to login to heroku. Login there and close the browser.
- Now you need to create a Procfile in the root folder and add the following code "web: gunicorn myproject.wsgi". And save it. run command pip freeze > requirements.txt.
- Now, we'll create the heroku app. command "heroku create". This will create an app with any name.
- Now follow the commands -
  - git add.
  - git commit -ma 'name the commit'
  - git push heroku master
- We're done deploying our Django application.

The deployed application can be viewed here:-

https://guarded-mountain-21182.herokuapp.com/

## Netlify

A React application was hosted on Netlify. Steps followed to deploy the application are -

- Login to netlify and go the console.
   Here we have used GitHub for CI/CD and this feature is very easy to use.
- You can push repo to GitHub and connect your GitHub to Netlify.
   Choose your new site from git and choose git.
- Now you choose the repository you wish to deploy.
- Choose a branch to deploy, choose the build command, and choose the publish directory,
- Click deploy. And that's it. It is that simple.

The deployed application can be viewed here:-

https://quizzical-minsky-f5c431.netlify.app/

## The Comparison -

### What's Netlify?

Netlify specializes in cutting-edge web hosting and automation solutions for businesses. It enables users to set up websites instantly. Companies that have a Netlify account can begin hosting their website on the platform. Netlify lets users host websites by dragging and dropping components from their computers onto its web application, or by directly importing their Git repositories.

#### Netlify Advantages -

**Ease of use and Simple pricing-** Netlify is known for its remarkable ease of use. It saves a lot of time for users who require fast custom website hosting. This benefit can influence your decision when it comes to considering this platform.

**Fast deployment -** Netlify project deployments are quite fast and convenient. The drag and drop functionality greatly reduces deployment time.

**Optimized assets -** Netlify lets users automatically optimize project assets with a range of advanced performance enhancement options.

**Continuous development -** The continuous development feature is activated automatically for Git repository deployments.

#### What is Heroku?

Heroku is a PaaS platform that offers support for several programming languages. It currently supports Node.js, PHP. Java, Python, Go, Scala, and Clojure. Heroku runs applications in virtual systems that can be customized based on the requirement of clients. The virtual computer systems of Heroku are known as dynos. These can be modified anytime based on the changing needs of users. Heroku users can add more resources through horizontal or vertical scaling.

#### Heroku Advantages -

**Scalable -** Heroku dyno containers are convenient as users can easily replicate them based on their resource requirements. Horizontal scaling is enabled by simply clicking a button and users can create as many instances of their application as required.

**Simple** - Heroku is preferred by users around the world for its simplicity, which makes it an easy-to-use platform. It offers a simple interface and easy one-click deployments. Releasing new software versions is also quite convenient using Heroku.

**Secure** - Heroku makes your applications secure at all times and reduces the need for repetitive security patching. It ensures complete security for your assets regardless of how complex your requirements are.

## Detailed Comparison -

	Netlify	Heroku
Description	Deploy modern website with one click.	Build, run, and operate applications entirely in the cloud.
Start Date	2014	2007
Parent Company	Independent	SalesForce
Employees Qty	97	224
Flexibility	Low	High
Price	Fixed Price	Pay by the Usage
Scalability	Scalable	Scalable
Ideal for	Modern web projects automation	Creating entire applications (including database) on a cloud environment
Continuos Integration	Out of the box	Option to turn it on
Developer Focus	Frontend	Backend
Type of Project	Web	Mobile and Web
Remarks	No sleeping apps	Sleeping apps

#### Conclusion -

- Netlify is focused towards frontend development
- Heroku is focused towards backend developers
- Netflify is ideal for web projects
- Heroku works with web and mobile apps
- Netlify provides continuous integration out of the box
- Heroku has the option to turn CI on